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MULTI-DIMENSIONAL POVERTY AMONG SAMURDHI WELFARE RECIPIENTS IN BADULLA DISTRICT, SRI LANKA

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MULTI-DIMENSIONAL POVERTY AMONG SAMURDHI WELFARE RECIPIENTS IN BADULLA DISTRICT, SRI LANKA

BY

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Abstract

This paper is an application of multidimensional poverty data to the policy need to improve the effectiveness of the national social protection programme, Samurdhi, in Sri Lanka. This paper argues that any programme aiming to promote people out of poverty, needs to be based on a good understanding of the nature of poverty among the target group. To this end, data from a pilot survey in the Badulla District, Sri Lanka, is used to compare Samurdhi households with non Samurdhi households in relation to deprivation in multiple dimensions. The analysis finds that Samurdhi households are deprived in the dimensions of quality of employment, dignity and psychological and subjective wellbeing, which have practical implications for the design and delivery of Samurdhi.

Acknowledgments

The paper is based on the results of a multidimensional poverty analysis carried out by the Centre for Poverty Analysis (CEPA)³, with financial support from the Partnership for Economic Policy (PEP)⁴. The survey questionnaire used in this research was adapted from the missing dimensions program developed by the Oxford Poverty & Human Development Initiative (OPHI)⁵. The authors are grateful to the team of enumerators from CEPA who collected the household, focus group and key person interview data and to all those who gave comments on early drafts of this paper.

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⁵ For more information on “missing dimensions of poverty”, see www.ophi.org.uk

1. Introduction

Social welfare programmes, though often designed with laudable aims, usually suffer from a number of failings in practice. These can include mis-targeting, inappropriate or inadequate benefits to meet the heterogeneous needs of the target population and lack of effective monitoring. They are also all too often unable to show effective poverty alleviation among the target group (Tudawe, 2002). It can be argued that most of these failings stem from an insufficient understanding of the nature of poverty. For poverty alleviation strategies to be successful, they need to be grounded in a holistic understanding of the nature of poverty among its target population. The strategy can then utilize the strengths and take account of the constraints to help people move out of poverty. A holistic understanding can also inform how to monitor and assess whether and when households in the target population have moved out of poverty. As Thorbecke notes ‘(b)efore the Development Community can become more successful in designing and implementing poverty-alleviation strategies, within the context of growth, we need to identify and understand better the various dimensions of poverty and how the latter interact over time and across space’ (Thorbecke, 2005:3).

Within the larger policy questions about poverty alleviation and social protection programmes, safety net programmes face particular challenges. Safety nets, which are a subset of a broader poverty alleviation strategy of a country, are non contributory transfer programmes targeting the poor and the vulnerable. They can take the form of cash transfers, food stamps, in-kind transfers, subsidies or fee waivers for essential services (Grosh et al, 2008). A good safety net programme needs firstly to be appropriate – by responding to the particular needs of the country, and adequate – by providing full coverage and meaningful benefits to the various groups in need of assistance, such as the chronic poor, the transient poor, the vulnerable and so on. In the case of safety net programmes therefore, a deep understanding of poverty as experienced by the target groups is critical.

One of the main drawbacks to such better understanding of poverty has been the lack of data. In a recent initiative, the Oxford Poverty & Human Development Initiative (OPHI) has developed survey modules to collect and analyse data, on several dimensions of poverty that appear important in the experiences of deprived people, but have been largely ‘missing’ in large-scale quantitative work on poverty and human development. The application of this survey module in Badulla District, Sri Lanka has generated a set of new data about poverty, and created an opportunity to explore the extent to which households are deprived in multiple dimensions of poverty, simultaneously.

In this paper, we analyse this new data to better understand poverty among recipients of the Samurdhi Welfare programme, which is the most important safety net

programme in Sri Lanka. The paper attempts to add to the discourse towards a more holistic understanding of poverty among Samurdhi beneficiaries, by presenting data on multiple dimensions of poverty among recipient and non recipient households. Poverty as a multidimensional phenomenon enjoys considerable acceptance at the conceptual level, in Sri Lankan policy circles, but is yet to be explored and analysed with survey data.⁶ Increasing the efficiency and effectiveness of the Samurdhi Programme has been a key policy focus of successive governments during the last decade and the programme has undergone many revisions and adjustments. In this context the new data presented in this paper about the nature of poverty among Samurdhi households, particularly about deprivation in multiple dimensions simultaneously, can provide guidance for future research and reforms.

The paper is structured as follows: the next section provides an overview of poverty and social welfare programming in Sri Lanka, focusing on the nature and current policy debates about the Samurdhi Programme. Section 3 provides an overview of multidimensional poverty including the theoretical framework. Section 4 introduces the data sources for this analysis, including a brief introduction to Badulla District where the survey was conducted, and an overview of the survey questionnaire and measurement methodology used. Section 5 contains the results of the multidimensional poverty analysis of Samurdhi and non-Samurdhi households focusing in particular on the dimensions of quality of employment, empowerment, dignity, physical safety, and psychological and subjective wellbeing, which are often missing from poverty analysis based on survey data. Section 6 concludes by considering the policy implications of this analysis.

2. Social Welfare Programmes in Sri Lanka

The Samurdhi programme was introduced by the Government of Sri Lanka in 1995 as the main national development instrument to reduce poverty and increase employment opportunities in the country. The Programme's stated aim is to improve the economic and social conditions of youth, women and disadvantaged groups of the society (Parliament of the Democratic Socialist Republic of Sri Lanka, 1995). The word "Samurdhi" is derived from a local term meaning prosperity, and the programme comprises of a short and long term strategy. The short term strategy involves *poverty cushioning* components, such as income support, social insurance and social development programmes. The long term strategy involves poverty alleviation through social mobilization, empowerment and integrated rural development (Gunatilaka et al, 1997:7).

At present, Samurdhi has three major components. The first is the provision of a consumption grant transfer (food stamp) to eligible households. This component accounts for more than 80% of the total annual expenditure of the programme, and is

⁶ From its early days, Samurdhi was exposed to the conceptual idea that poverty is multidimensional. See Ratnayake, 1998.

administered by the Department of the Commissioner General of Samurdhi. The consumption grant aims to assist low-income families to maintain at least a minimum standard of living, defined according to a poverty line based on food and non-food items. Currently, Samurdhi provides six types of stamps, with the minimum at Rs. 210 and the maximum at Rs. 1,500⁷. The value of the grant received depends on family size. The second component covers the savings, credit, insurance and social security schemes which aim to improve household access to financial capital. Within this component, Samurdhi banks were established as cooperatives, with Samurdhi beneficiary households as shareholders, and they issue loans to members mostly for agricultural and self-employment activities. Recipients of the consumption grant also contribute to the Samurdhi social security fund, which pays social security claims to Samurdhi beneficiaries in case of birth, marriage, illness, and death (Glinskaya, 2000). The third component of Samurdhi is a workfare and social development program which includes adult literacy; scholarships; programs for the aged, disabled, destitute, and alcoholics; and narcotics prevention programs. Within this component, there is also a community infrastructure development programme where small scale irrigation, roads and water supply projects are undertaken by the community (Ministry of Samurdhi and Poverty Alleviation, 2007).

In delivery, the components of the Samurdhi programme are interlinked. For example, the savings and micro insurance contributions are mandatory for consumption grant recipients as these are deducted at source and a reduced amount is available for consumption support. Recipients of the income transfer also make up the large majority of Samurdhi Bank members, and Samurdhi transfer recipients are required to provide labour for the small community-based infrastructure projects (Gunatilaka et al. 1997). Finally, selection for a Samurdhi Consumption grant has wider implications beyond access to the programme's other components; in the absence of accurate data to identify the poor at the local level, many state and non-state actors and projects use selection for a Samurdhi grant as the criteria for identifying the poor in the country (Gunatilaka, 2010).

Recent issues and debates

The effectiveness of Samurdhi targeting has been a topic of substantial national debate during the past decade, and much of this discussion has focused on the effectiveness of its targeting (Gunatilaka, 2010). In the past, the Samurdhi Programme has been implemented from a strongly income/consumption centered understanding of poverty. Initially, beneficiaries were selected through direct income measures but as income is generally unobservable and almost impossible to corroborate, selection varied as program officers used their own interpretations to translate the criteria for the selection of beneficiary families. This resulted in substantial lack of transparency in beneficiary selection. In the mid 2000s, proxy

⁷ Rs.100 = USD 0.89 in December 2010

means testing (PMT) replaced direct income measures, and the model developed included variables for: community characteristics (presence of a bank or divisional headquarters in the community); household assets (consumer non-durables, farm equipment); household ownership of land and livestock; characteristics of head of household (age, education, main activity, marital status); household demographics (household size, number of dependents, whether children attend school); and, housing characteristics (owned housing or not, type of floor, wall and latrine, number of rooms) and households must score below an identified cut-off to be selected. Despite the number of variables used however, this method too is largely based on the income dimension as it attempts to increase the accuracy of the income measures.

A recent change in identifying beneficiaries is through the introduction of a community screening process, also known as the Family Classification Method (FCM). The FCM is carried out at a public meeting with the entire village, where the program officer explains the variables and selection criteria and villagers then rank themselves based on those selected criteria. Because this screening process is carried out in a public meeting where most of the villagers are familiar with the assets ownership of their neighbors, there is greater transparency and reduced problems of information asymmetry. The FCM is based on a set of variables similar to those used in the PMT but the community screening is pointing to the importance of the non-income/consumption dimensions of poverty at the local level, such as social exclusion, access to services etc⁸. Overall however, despite increasing acceptance among the programme planners that poverty is experienced in multiple dimensions, this is yet to be systematically incorporated into the programme's targeting strategy.

The programme is thought to suffer from both exclusion and inclusion errors, but recent controversies have prompted programme implementers to reduce inclusion errors. From a high of 1.96 million beneficiary households in 2005, the number of beneficiary households currently stands at 1.6 million (Central Bank of Sri Lanka, 2010). However, as Samurdhi recipients account for 32% of the population, and in the context of HCI at 15.2%, policy makers are keen to further streamline the programme to be both relevant and effective.

While improving targeting has been the main focus of research and policy attention, less attention has focused on another element of programme effectiveness – the numbers of beneficiaries graduating out of the programme. There is very little data in the public domain about graduation rates, nor much evidence to indicate that there is substantial graduation out of the programme. On the contrary, beneficiaries are often averse to having the Samurdhi benefits removed. This lack of a clear exit strategy, with incentives for beneficiaries to graduate out in a sustainable manner and within a defined time frame, is a design weakness in the programme that needs to be addressed (Hewavitharana, 2004). The programme is currently following a multi-

⁸ Based on anecdotal data as systematic studies of the impact of the FCM are yet to be available in the public domain.

pronged approach, providing interventions in economic, social, physical and psychological, and political/leadership domains on the rationale that such a multiplicity of varied activities - from food stamps to loans, to community infrastructure programmes, to programmes for adult literacy and alcohol abuse – is required to equip beneficiaries to move out of poverty. However, their effectiveness in reducing poverty in these multiple domains is neither known nor systematically monitored. As a result, any discussion on the effectiveness of this portfolio of interventions is hampered as it cannot be done with reference to data and evidence.

3. Multidimensional Poverty

Poverty is a complex phenomenon. Before it can be measured, it needs to be understood. However, measurement of poverty has all too often dominated this discourse – because measurement allows knowing, understanding, design of interventions and assessing whether interventions are successful (Coudouel et al quoted in Gunewardena, 2005: 2). The understanding of poverty is in some senses ‘limited’, it can be argued, by the policy need to measure poverty.

Despite years of poverty research, there is no single, universally agreed definition of poverty. While there is conceptual vagueness about what exactly is poverty, there are more and more sophisticated ways to measure poverty. The most common is the monetary or money-metric approach, but there is growing criticism of this approach on the basis that it does not help to understand poverty in its full complexity. In his book ‘Development as Freedom’, Amartya Sen defines poverty as not being able to do certain things; lacking capabilities to function or lacking ‘the substantive freedoms [a person] enjoys to lead the kind of life he or she values’ (Sen, 1999). In what is now commonly called the ‘capabilities approach’, poverty is understood not only as multidimensional but also as deprivation in what people value being and doing (Nussbaum quoted in Alkire, 2007). The focus therefore is not just in terms of deprivation as an outcome, but also deprivation as a ‘capability space’. A key analytical distinction the capability approach makes is between the means and the ends of well-being and development; only the ends have intrinsic importance, whereas means are only instrumental to reach the goal of increased well-being and development. However, both in reality and in Sen’s more applied work, these distinctions often blur (Robeyns, 2003). Alkire (2007) notes that the capability approach can be applied differently depending on the place, situation, level of analysis, available information or even the kind of decisions involved. There is no universally accepted relevant set of domains or even methodology for identifying the domains of poverty which a certain group values. In this regard, the capability approach is fundamentally a normative framework through which poverty and policy questions can be understood and analyzed.

It is now almost universally recognized that poverty is deprivation experienced in multiple dimensions, and that multidimensional poverty is a richer concept to

understand the phenomenon than the traditional uni-dimensional monetary approach (Asselin, 2009). While there is as yet no consensus on what these dimensions may be, there has been a progressive broadening of the definitions and measurements of poverty over the past two decades. Chambers (in Gunewardena, 2005) suggests that at a minimum, there are three dimensions of poverty: survival, security and self respect. Baulch (1996) expands this conceptualization of poverty in a 'pyramid of poverty concepts' which goes from only private consumption to a conceptualization of poverty that includes private consumption levels, access to common property resources, access to state provided commodities, ownership of assets, dignity and autonomy. While the broadening of the definitions and conceptualization of poverty along the multidimensional approach may take us closer to the reality of poverty, such broadening is accompanied by increasing difficulties in measuring poverty. Such broadening also significantly affects our thinking about strategies to address poverty as a broader definition expands the set of policies that are relevant to the reduction of poverty (Kanbur and Squire, 1999).

Composite poverty indices offer powerful alternatives to one-dimensional, money-metric approach to measuring poverty and well-being. The Human Development Index (HDI), first developed in 1990, is such a composite index which measures development by combining indicators of life expectancy, educational attainment and income into a composite human development index (UNDP, undated). However, the HDI has been criticised as being a very incomplete measure of human development, leaving out many aspects of life which are of fundamental importance (Ranis et al, 2005). The Human Poverty Index (HPI) was introduced in 1997 and focused on poverty and deprivation. It is composed of indicators for measuring longevity, knowledge and a decent standard of living and used country averages to reflect aggregate deprivations in health, education and standard of living (UNDP, undated). The 2010 Human Development Report contains a new index, the Multidimensional Poverty Index (MPI) which replaces the HPI. The MPI has three dimensions mirroring the HDI - health, education and living standards – and is able to capture the experience of poverty in multiple dimensions simultaneously. It shows how many people experience overlapping deprivations and how many deprivations they face on average (UNDP, 2010).

While a substantial innovation in measuring poverty, the MPI is still limited by the data available in the national surveys. For example, some dimensions have been identified as 'missing' from national surveys such as the World Bank's Living Standards and Measurement Survey (LSMS) and Core Welfare Indicators Questionnaire (CWIQ); USAID's Demographic and Health Survey (DHS); and UNICEF's Multiple Indicator Cluster Survey (MICS) (Alkire, 2007). These five 'missing dimensions' of poverty are quality of work, empowerment, physical safety, ability to go about without shame and psychological wellbeing. To date, these dimensions have been largely overlooked in large-scale quantitative work on poverty and human development. In this context, OPHI has designed questionnaire modules

that can be integrated into national household surveys to obtain these data and this module was piloted in several countries, including in Sri Lanka.

4. Pilot of Multidimensional Poverty Module in Sri Lanka

OPHI's multidimensional poverty module was piloted in Badulla district, Sri Lanka. Badulla was selected for this study because it offered the opportunity to test the modules within a context that represents all of Sri Lanka's sectoral divisions; urban, rural and estate. It is one of the poorer districts in the country, but still contains varying levels of consumption poverty rates within its geographical extent.

One among the 25 districts which comprise Sri Lanka, Badulla is located in the south east of Sri Lanka. It covers an area of 2,818km² and is the eighth largest district in the country. The population of Badulla District was 779,983 persons at the 2001 census (about 4% of the country's population), and it is estimated to be growing at an average annual rate of 1%. Migration out of the area is common, with most individuals leaving in search of better employment opportunities in other parts of the country as well as abroad. The population density is about 276 persons/km², which is slightly below the national average of 300. The population in the district is distributed among the rural (72.7%), estate (20.7%) and urban (6.6%) sectors.

The topography of Badulla district is mostly hilly and the climate is mild, which is suitable for the cultivation of tea, as well as a large variety of vegetables. Agriculture is the main occupation for 61% of the employed workforce, while 26% are engaged in the service sector, and 12% in industry. Much of the employment in the area is in the informal sector. Labour force participation rates among male and female are 65.2% and 36.6% in Badulla (compared to 65.5% and 28.1%⁹ respectively at the national level).

According to the national poverty line developed by the Department of Census and Statistics (DCS), 37% of the population of Badulla was classified as poor in 2002/03, and five of its 15 DS Divisions classified as among the poorest 100 DS Divisions in the country (DCS 2007). Consumption poverty in the district, in line with national and district trends, has declined to 24% (about 190,000 people) in 2006/07. Despite this reduction however the proportion of the poor in Badulla still makes up 7% of the overall proportion of the poor (DCS 2007). The Samurdhi programme, comprising the welfare grant component as well as other components relating to credit, savings and rural development, has been implemented in Badulla since programme inception. Approximately 25.9% of the district population are Samurdhi recipients, but in common with the challenges noted in the national data regarding the Samurdhi targeting, some exclusion and inclusion errors are thought to be present. In addition,

⁹ The higher proportion of women working in Badulla reflects the importance of the estate sector, where the labour force is largely female.

until recently poor households in the estates, which make up 20% of Badulla's population, were not eligible for the national poverty programme as the estate management was responsible for their social protection.

The methodological approach of this research was mixed method, including both quantitative and limited qualitative data gathering and analysis. Data collection was through a household survey based on OPHI's 'missing dimensions' module, adapted to the Sri Lankan context¹⁰. The household survey was preceded by a series of Key Person Interviews (KPI) and Focus Group Discussions (FGD) which were based on qualitative, exploratory, semi-structured tools of data collection. Eleven KPIs were conducted with researchers, who are both producers and users of poverty related data in Sri Lanka to explore the relevance of the dimensions and indicators in the Sri Lankan context. Six FGDs, representing men and women from the three main sectors of urban, rural and estate areas, were completed in the Badulla District to understand contextual issues particular to the Badulla area within each of the sectors, the relevance of the dimensions and indicators at a community level, to ascertain if any components had been missed in module, and finally to test the wording and translation of the questions.

The household survey was then administered to a district-wide sample of 260 households, representative at the district and sectoral levels¹¹. Stratified random sampling was used to select administrative areas within Badulla and households were selected for interview through systematic random selection; every fifth house was selected using the right hand rule. The respondent in each case was the head of the household or the spouse, and an effort was made to obtain a spread of male and female respondents. In all, 229 interviews were completed (Table 1).

Table 1: Sample Profile

	Number in sample	% in Sample*	% in Badulla**
Samurdhi Recipient Households	40	19%	25%
HH with per capita income below the poverty line	98	44%	24%
HH without salaried employment	108	51%	NA
HH where HHH has education below secondary school	77	34%	NA
Female Headed Households	24	11%	NA
Estate households	50	20%	20%
Rural households	143	73%	73%
Urban Households	36	7%	7%

*Weighted sample, to obtain district level representativeness Source: Household Survey Results CEPA, 2010

**Source: DCS 2007; and DCS 2009

¹⁰ A copy of the household survey script can be found at <http://www.ophi.org.uk/research/missing-dimensions/projects/>.

¹¹ Sample was weighted to increase the number of urban households to more than 30.

Data was collected for each dimension according to indicators proposed by OPHI in a series of working papers¹². Indicators were selected for analysis based on data availability as some indicators did not generate useable information. Deprivation in dimensions was measured using the respondent as the unit of analysis. While data was available for some indicators for all the household members (individuals), summarizing these data points into a single household characteristic proved to be problematic. Hence, the respondent was used as the unit of analysis, to maintain data consistency.

The data was analysed by comparing Samurdhi recipient households in the sample with non Samurdhi recipient households in the sample, in relation to their poverty levels in multiple dimensions. The analysis process involved several steps. First, descriptive analysis was carried out for all variables, to understand the data distribution among Samurdhi recipient households and other households. Thereafter, correlation analysis was used to understand the relationship between the variables and these two types of households. Where a statistically significant relationship was found, odds ratio analysis was carried out, to ascertain the odds of being deprived among the two groups, namely Samurdhi and non Samurdhi households.¹³ In addition to that factor analysis was carried out for selected variables to identify the indicators for dimensions. Finally the deprivation of each dimension was measured by constructing a composite index for each dimension.¹⁴

Poverty measurements often proceed as two steps. First, the ‘identification step’ which defines the criteria to distinguish the poor from the non poor (poverty line/cut off). The second is ‘aggregation step’ which aggregates data in to an overall indicator of poverty (poverty index/measure) (Sen, 1976). In this paper, identification and aggregation steps were carried out, but within a single dimension to obtain deprivation within that dimension. At the same time, these steps have been separately carried out for multiple dimensions and the results of this analysis are shown below.

5. Results

The poverty analysis shown below focuses on the multiple dimensions of income, household assets and shelter, quality of employment, empowerment, dignity, physical safety, and psychological and subjective wellbeing. The analysis attempts to draw out the differences and similarities between Samurdhi and non Samurdhi households in relation to these dimensions, to add to the understanding of the nature of poverty among Samurdhi households.

¹² For detailed discussion of suggested indicators, see Lugo (2007), Ibrahim and Alkire (2007), Reyles (2007), Diprose (2007) and Samman (2007).

¹³ see Appendix 1 for the output of the odds ratio analysis.

¹⁴ see Appendix 2 for the steps in selecting variables for constructing composite dimensional deprivation indices. Due to methodological issues in aggregating data (namely selection of variables to construct the composite and high numbers of missing values) composite indices were only constructed within dimensions, and no attempt made to further aggregate into a multidimensional poverty index.

Income, Household Assets and Shelter

Even though I like to work, there is no work to do. Some months, I have had work for just two days only. They took away the solar cells, because we couldn't pay...Last night my wife and I decided not to have dinner altogether. We discussed and we decided together.

- Male, 51 years, Rural, Samurdhi household

Badulla is one of the poorer districts in Sri Lanka. According to the Household Income and Expenditure Survey (HIES) of 2006/2007, the mean per capita income in the Badulla district was projected to be Rs.5,428/- by 2009, below the national average of Rs.6,463/- (DCS, 2007). Survey data shows however that actual income levels may be lower, and that there is substantial group level variation between estate, rural and urban households. The survey data also shows that Samurdhi households are associated with low income; the mean per capita income of Samurdhi households, at Rs.2,144, is below the district poverty line of Rs. 3,151¹⁵. On the other hand, the mean per capita income among non Samurdhi households is Rs.5,111. Overall, 82.5% of Samurdhi households have incomes below the district poverty line compared to 44.3% among non Samurdhi households (Table 2). Overall, Samurdhi households have 5.7 times the odds as non Samurdhi households of having an income below the poverty line.

Table 2: Per Capita Income

	Non Samurdhi Households	Samurdhi Households	Samurdhi Yes = 1 , No = 0	
			Sig.	Odd Ratio
Below the poverty line (Yes = 1, No = 0)	44.3%	82.5%	0.000*	5.776

* Odds ratio is significant at the 0.05 level

Due to well known challenges of using reported income of households, lack of asset ownership can also be used as a proxy indicator of poverty. Fewer Samurdhi households have access to household assets such as radio, television and refrigerator compared to the non Samurdhi households. For example, 69% of Samurdhi households have a radio compared to 79% among non Samurdhi households; 63% have a TV compared to 81% among non Samurdhi households; finally, just 9% have refrigerators compared to 37% among non Samurdhi households. Given the hilly terrain in most parts of Badulla, transport assets such as bicycles are not owned by many households whereas communication assets, such as mobile and land line telephones, are available to about half the population, except among Samurdhi households where the rates are around 30%. Overall, the distribution of asset ownership is in line with the trend shown in the analysis of income data, where Samurdhi households have a greater likelihood of being deprived.

¹⁵ District Poverty Line as at January 2010 to coincide with period of survey data collection.

An important dimension of poverty is access to basic needs such as adequate shelter, sanitation and electricity. The household survey shows that good basic needs indicators are prevailing in Badulla. For example, 82% of the population have cement or tile floors, 80% have brick or block walls, and 82% have access to a water seal toilet. Electricity coverage is in line with the national data, with 80% having access to the main grid. Samurdhi households however are less likely to have access to such basic needs¹⁶. For example, Samurdhi households have 3.1 times the odds as non Samurdhi households of having poor quality flooring (that is a clay, mud, sand etc), 2.4 times the odds of having poor quality walls (that is mud, cabook, metal sheets, planks etc) and 2.6 times the odds of having less than 2 rooms in the house. They also have 4.3 times the odds of non Samurdhi households to rely on a less stable source of energy than electricity (such as kerosene lamps) for lighting.

Aggregating these variables into 4 indicators¹⁷ shows that a greater proportion of Samurdhi households are deprived in income and access to electricity (Table 3). In contrast, in relation to shelter and sanitation there does not appear to be much difference in deprivation among Samurdhi and non Samurdhi households.

Table 3: Deprivation by headcount – Income and Basic Needs

Deprivation by indicators	Non - Samurdhi %	Samurdhi %
Income (<i>per capita income is below the district poverty line</i>)	44.3	82.5
Shelter (<i>poor quality floor / walls / roof / less than 2 rooms</i>)	51.9	52.4
Sanitation (<i>no water seal toilet</i>)	17.7	14.0
Energy for Lighting (<i>other than electricity</i>)	18.3	50.0

However, there is a concentration of deprivation among Samurdhi households that the above aggregation does not capture. When deprivation in multiple indicators are considered (Table 4), a larger proportion of Samurdhi households compared to non Samurdhi households are deprived in 3 indicators simultaneously, as well as deprived in all four indicators simultaneously; in other words they have income below the poverty line, poor shelter, poor sanitation and no access to safe sources of energy for lighting. Because of large number of missing data however the table should be interpreted for trends rather than levels of deprivation in the two groups of households.

¹⁶ See Appendix 1

¹⁷ For steps followed in aggregation, please see Appendix 2

Table 4: Deprivation in Multiple Indicators – Income and Basic Needs

Deprivation by number of indicators	Cumulative %	
	Non Samurdhi	Samurdhi
1 or more	100	100
2 or more	80.2	100
3 or more	33.3	59.1
All 4 indicators	7.3	22.7

n = 118, missing values 111 households (48.6%)

Quality of Employment Dimension

My husband does paddy farming, and when there is no farm work he goes to work as a helper at construction sites, it is daily paid work...last month he was sawing planks and injured his finger. From that, he got fever and was in bed for about a week. He only went back to work yesterday. They didn't even give money for medicines, we ourselves had to bear the expense of that.

- Female, Rural, Samurdhi household

Having a good and decent job is generally associated with being out of poverty, whichever way poverty is defined (Lugo, 2007). However, despite the centrality of income and employment to understanding poverty, much of the data that is collected in this respect in Sri Lanka relates to the labour market. There is a dearth of information regarding the quality of employment, which has been highlighted by ILO's decent work agenda (ILO, 2009). In this section we look at the quality of employment of Samurdhi and non Samurdhi households, using indicators suggested by Lugo (2007), namely protection (based on the formality of employment, as well as protection against shocks), safety and occupational hazard, under/over employment and discouraged unemployment.

It is a well known fact that in Sri Lanka, a high proportion of employment is provided by the informal sector. In Badulla District, 70% of the employment is provided by the informal sector, which is linked to the importance of agriculture in the District (Ministry of Labour Relations and Manpower, 2009). CEPA's household survey data confirms that wage or salaried employment is the most common source of employment,¹⁸ and it is also characterized by high informality. Among employees, 29% are wage workers, while 23%, though salaried, work in enterprises in the informal sector. Among Samurdhi households this informality is marked; as many as 56% of employed persons in these households are wage workers and 50% of employees who are salaried, work in informal enterprises. The informal sector however is heterogeneous, and while consistently low levels of earnings appears to be

¹⁸ Employees (those who work for pay, in terms of wages or regular salary) is the single largest category, followed by employers/own account workers (self employed persons) and unpaid family workers.

associated with casual wage workers, there are relatively high income pockets among the salaried and self employed households¹⁹. Among Samurdhi recipient households, there is a high prevalence of wage work, as they have 6.3 times the odds of non Samurdhi households to be engaged in non permanent work, 10 times the odds of non Samurdhi households to have daily wage and other non monthly wage payment arrangements, and 4 times the odds of non Samurdhi households to work without written contracts (Table 5).

Table 5: Protection, from Formality of Employment among Employees

	Non Samurdhi Households	Samurdhi Households	Samurdhi Yes = 1 , No = 0	
			Sig.	Odd Ratio
Employment basis (Temporary/Casual = 1, Permanent = 0)	46%	81%	0.000*	6.368
Non monthly payment of salary (Yes = 1, No = 0)	42%	76%	0.000*	10.108
No written contract (Yes = 0, No =1)	55%	79%	0.000*	4.170
No social security benefits (Yes = 0, No =1)	57%	87%	0.000*	10.458
No retirement pension (Yes=0, No=1)	84%	90%	No significant correlation	

* Odd ratio is significant at the 0.05 level

There is substantial income vulnerability due to sickness among the population, as only about 33% of employees have paid sick leave, compared to 17% among employees in Samurdhi households. While 45% said that their work does not provide any pension, social security benefits or insurance for retirement, employees households have 10.4 times the odds of employees in non Samurdhi households to be without social security provided by their place of employment. A small number of employees in Samurdhi households have public sector employment and lack of retirement pension is therefore not significantly associated with being a Samurdhi recipient household.

The importance of such protection from employment is made clear as most households do not have adequate own resources to withstand shocks. 24% of non-Samurdhi households reported that they have sufficient savings to get by if a household member lost their source of income, compared to less than 3% of Samurdhi households who have such savings. Qualitative data shows that such households are often compelled to further reduce consumption when faced with shocks.

¹⁹ While there is not much income distribution among wage earning households (both mean and median income are in the range of Rs.11,000 to 13,000), there is substantial income distribution among salaried households (mean income is Rs.22,451 while 5% have income in excess of Rs.75,000) and self employed (mean income is Rs.17,755 while 2% earn in excess of Rs.75,000).

Another aspect of social security is for old age. More than 51% of Samurdhi households have no plans for their retirement age, compared to about 26% among non Samurdhi households. While about 20% in both groups are planning to rely on children or other household members, among non Samurdhi households as many as 30% were protected by access to a retirement pension scheme or lump sum payment of social security benefits on retirement. This is markedly visible in the estate sector where employees have access to EPF/ETF payments. In comparison there are only 3% such households among Samurdhi recipients. One of the components of the Samurdhi programme is to provide micro insurance and savings programme for beneficiary households but there is no indication of higher savings levels among Samurdhi households compared to the rest of the population; in line with non Samurdhi households, only about 9% are planning to rely on savings and insurance payments in their old age. The Samurdhi consumption grant is also seen by some as protection during old age. Overall, in terms of protection Samurdhi households have 8.2 times the odds of non Samurdhi households to be deprived in at least one indicator and 3 times the odds of being deprived in multiple indicators simultaneously²⁰.

Another aspect of employment quality is in relation to occupational safety and health, which can be measured in relation to workplace exposure, illness and accident. Due in part to the nature of livelihoods prevailing in Badulla, the incidence of serious workplace accidents is quite low. Only 14% of employed persons in non Samurdhi households and 8% of employees in Samurdhi households reported a serious accident or illness linked to their employment. There is no apparent relationship with Samurdhi households, and accidents and illness appear to be more prevalent among formal, salaried employees, particularly in the estate sector. In the rural sector, to which most Samurdhi households belong, employees are more likely to undergo accidents and illnesses related to bone, joint and muscles, whereas estate workers are more likely to complain of headache, eye strain, lung and breathing problems. Accidents or illness leading to permanent damage is very rare and has occurred in less than 2% of cases overall. Satisfaction with work conditions was varied with employees from Samurdhi households generally reporting good work conditions compared to, for example estate workers, who reported harsher work conditions with substantial numbers complaining of inadequate clean water, inadequate toilet facilities, uncomfortable postures, exposure to harsh weather and having to carry heavy loads²¹.

In terms of time, data is available about respondents engaged in multiple-activities as well as perceptions about over and under employment. About 65% of employees, among Samurdhi and non Samurdhi households, have a secondary occupation, and this is overwhelmingly in self employment in the agricultural sector – which is small-

²⁰ See Appendix 1, Table 2

²¹ See Appendix 1, Table 2.

scale vegetable and cash crop cultivation in the home garden or close to the home. At the same time, the household survey data confirms that there is substantial under-employment in Badulla, in common with the rest of Sri Lanka. Among employed persons, close to 68% would like to work more. There is no significant difference between Samurdhi and non Samurdhi households in relation to under employment, because both types of households are experiencing it. However, in relation to over-employment Samurdhi households are significantly different from non Samurdhi households. A number of respondents from Samurdhi households reported that they would like to work fewer hours - but not with a reduction of income. They would like to reduce the hours of work because as it is, they tend to work longer hours because of they have low income and are vulnerable. Among non Samurdhi households there was no reporting of such over employment.

About half the population of working age in the sampled area are not engaged in any income generating activity. Samurdhi households are in line with the population trend, but among some categories such as Estate households and women, there is a larger proportion of persons who are not directly engaged in any income generating activities. Most of these persons (about 62%) are aged, students or otherwise uninterested in working which is more commonly seen in the rural sector. There is however a substantial number (30%) who are not working because they have dependent care responsibilities or household work. In particular in urban areas, women are not working as they have household responsibilities – which in rural areas are often shared with the extended family. Among Samurdhi households, 78% of household members are not engaged in income generating activities due to household responsibilities. However, there is a greater incidence of interest in working; 10% (compared to 5% among the population) are awaiting word on applications already submitted and 12% (compared to just 2% among the population) were trying to look for work but discouraged due to costs and other considerations. The incidence of persons waiting on applications may also be a reflection of networks available to Samurdhi recipients through the programme, which are not as easily available to non Samurdhi households.

Statistical analysis shows that discouraged unemployment²² in Badulla District is mainly a gendered phenomenon. In poor households, including in Samurdhi households, female members are not engaged in income generating activities mainly because of household responsibilities such as looking after children and the elderly. This is reflected in the strong correlation between the gender of the household member and being discouraged due to household responsibilities. Similarly, female headed households are correlated with discouraged unemployment due to difficulties in finding work, which reflects the narrower networks available to female heads of families as well as reluctance to travel far from home to work.

²² Discouraged Unemployment: a person would prefer to work but is discouraged and has given up hope of finding work, either from personal or other's experiences - Lugo (2007)

Based on this analysis, the data was aggregated²³ to show deprivation by indicator (Table 6). Comparing Samurdhi Households with non Samurdhi households, there is more widespread deprivation in relation to protection, as well as over employment among Samurdhi households. Interestingly, in relation to deprivation in occupational safety, more employees in non Samurdhi households are deprived than in Samurdhi households. In terms of multi dimensional poverty, within the dimension of employment quality, employed persons in Samurdhi households compared to employed persons in non Samurdhi households are experiencing deprivation in multiple indicators simultaneously (Table 7).

Table 6: Deprivation by Headcount – Employment Quality among Households with Employees

Deprivation by indicators	Non – Samurdhi %	Samurdhi %
Protection (<i>no savings to get by in case of loss of job / no formal plans for retirement</i>)	80.3	97.2
Safety and Occupational Hazards (<i>illness, injury or disability from job / concerned about permanent harm from job in the future</i>)	58.8	45.0
Under employment	68.3	71.9
Over employment	9.9	28.1
Multiple income activities	65.5	67.4

Table 7: Deprivation in Multiple Indicators – Employment Quality

Deprivation by number of indicators	Cumulative %	
	Non Samurdhi	Samurdhi
1 or more	96.1	100.0
2 or more	85.7	100.0
3 or more	64.9	100.0
4 or more	31.2	26.4
All 5 indicators	0.0	5.3

N= 96, missing values 133 households (58.3%)

Empowerment

What are agency and empowerment? Amartya Sen... defines human agency as “what a person is free to do and achieve in pursuit of whatever goals and value he or she regards as important”. More simply, an agent is “someone who acts

²³ See Appendix 2 for details on the methodology followed for aggregating data into deprivation by indicator

and brings about change”. The opposite of a person with agency is someone who is coerced, oppressed and passive.

- Ibrahim and Alkire, 2007:3

There was no concept of individual decision making (in the household). There was nothing they could think of for individual level decisions. In fact, they saw taking individual decisions (“thani theerana”) as a negative, having authoritarian connotations, which persons of power such as politicians would take for better or worse. Majority decisions ie those taken by a group was seen to be better.

- Enumerator notes
from Focus Group Discussion with urban, male participants

The Samurdhi Programme contains the idea of empowering the poor for the effective eradication of poverty (Ministry of Finance & Planning, 2006). To this end, the programme contains components to encourage capacity building of beneficiaries through trainings etc, as well as community organization. Empowerment however remains a difficult concept to measure, and as the above two quotations show, there may not be much consensus about the concept itself. In this study, we consider empowerment of Samurdhi and non Samurdhi households, using indicators suggested by Ibrahim and Alkire (2007) namely empowerment as choice (in specific domains in life such as job, work, health, religion, safety) by looking at household decision making and domain specific autonomy (relative autonomy); empowerment as change (global autonomy) looking at ability to change aspects in life and ability to change aspects in community.

In terms of household decision making, there is no significant difference between respondents from Samurdhi and non Samurdhi Households. Most respondents noted that household decision making regarding the kind of job one does, and the choice and practice of a religion, are often made by themselves or jointly with other household members. In the case of decision making regarding household tasks one does, minor household purchases, ensuring personal safety and what to do in case of a serious health problem, decision making is mostly done jointly with other household members²⁴.

In the village (that is, in the rural sector), the head of the household cannot take the decision without spouse, and the spouse cannot take a decision without the household head. The household head takes every decision thinking about the spouse and children. That is the normal situation in the Sri Lankan context.

- Key Person Interview, Samurdhi Division,
Ministry of Nation Building and Estate Infrastructure Development

²⁴ See Appendix 1, Table 3a.

To understand motives behind decision making, domain-specific relative autonomy was assessed. This analysis tried to ascertain if decisions are taken due to negative reasons – such as external pressure or to obtain external approval, or for positive reasons – such as because the person identifies the activity as valuable, or because the activity is integrated with the person’s other activities. In terms of domain specific relative autonomy, there is little difference between respondents from Samurdhi and non Samurdhi Households except in relation to choice of job; respondents from Samurdhi households have 27.4 times the odds of respondents from non Samurdhi households to feel that the decision about the job they do is based on the need to obtain external approval, specifically that of other household members.²⁵ This response very likely reflects the pressure felt by Samurdhi households to find work due to their low income situation.

In relation to global autonomy, that is ability to change aspects in life and ability to change aspects in community, about 53% of respondents from non Samurdhi households and 48% from Samurdhi households felt that that had no control to change aspects of their life, while 47% of respondents among non Samurdhi household and 34% from Samurdhi households felt that they had no control to change aspects of their community. However, there is no statistically significant difference between these two groups.

In relation to aggregate²⁶ deprivation by empowerment indicators (relative autonomy and global autonomy), there is no significant difference between Samurdhi and non Samurdhi households. Table 8, which shows deprivation in multiple indicators simultaneously, suggests that more non Samurdhi households are deprived in relation to one indicator of empowerment, while more Samurdhi households are deprived when considering deprivation in both indicators simultaneously.

Table 8: Deprivation in Multiple Indicators – Empowerment

Deprivation by number of indicators	Cumulative %	
	Non Samurdhi	Samurdhi
1 or more	59.4	48.8
2 indicators	17.4	30.5

n = 75, missing values 154 households (67.1%)

Dignity and Respect

Using Adam Smith’s famous example of linen shirts and leather shoes, Amartya Sen suggests that there a linkage between poverty and the ability to go about without

²⁵ See Appendix 1, Table 3b.

²⁶ See Appendix 2 for steps followed for aggregation

shame (quoted in Reyles, 2007:7). The implication here is that lack of certain commodities, which can vary widely by the context, can result in feelings of shame and humiliation. Like other basic capabilities therefore this dimension is dependent on having material resources. In this section, we consider the prevalence of feelings of shame, and their linkage with poverty by considering Samurdhi and non-Samurdhi households. For this purpose we focus on several indicators suggested by Reyles (2007), namely the shame associated with being poor, levels of shame proneness, feelings of being treated without respect, unfairly or with prejudice, perceptions of group based discrimination, and finally, levels of accumulated humiliation.

The results of the pilot in Sri Lanka indicate that in the community as a whole, being poor is not widely associated with feelings of shame. About 77% of the respondents said that they would not be ashamed if they were poor and there is no significant difference between Samurdhi and non Samurdhi households. However, responses to such a direct question may be masking a more complex feeling about poverty.

Poverty is common to us all, it is not something to be ashamed of... But when my children are poor, I feel bad about it. Everyone should be living well. To say my children are poor is not a shame to me, it is a sadness.

- Female, 72 years, Rural, Samurdhi household

We manage with what we have. Even if we don't have anything we will never go to beg from anyone or to tell anyone that we don't have anything. We will live in whatever way we can.

- Female, 52 years, Rural, Samurdhi household

There is also a fairly widely held perception that people who are not poor, make people who are poor feel bad. Close to 70% of households felt this, compared to less than 20% who said that they would be ashamed if they or a family member was poor. It is interesting that respondents see indications of shame associated with poverty in the wider society, but do not see this in relation to their own situation. Correlation analysis suggests an association, not with being Samurdhi or non Samurdhi households, but rather the environment within which the household is located, with urban respondents more likely to say that people who are not poor make poor people feel bad.

Shame proneness tries to capture the frequency of experiencing the emotion shame or shame-related affective descriptors, in relation to negative events. Samurdhi households are more likely to report commonly having feelings of embarrassment, feeling ridiculous, childish and helpless (Table 9). In particular, Samurdhi household respondents have 2 times the odds of non Samurdhi household respondents to report often feeling helpless, or “*asarana*” – which is a commonly used word in Sri Lanka to identify the poor.

Factor analysis²⁷ indicates a correlation between the different feelings, suggesting that households which are prone to one such feeling, are also prone to other similar feelings of shame. This may also capture that in most cases, households are referring to a single incident or issue, which resulted in multiple feelings of shame and humiliation. Qualitative analysis shows that often these incidents relate to problems with family members, neighbours, villagers etc.

Table 9: Shame proneness

How common are these feeling for you? Almost always/Often = 1, Occasionally/Rarely or never = 0	Non Samurdhi household	Samurdhi household	Samurdhi Yes = 1 , No = 0	
			Sig.	Odd Ratio
Embarrassment	16%	32%	0.022*	2.444
Feeling ridiculous	4%	14%	0.020*	3.883
Self-consciousness	11%	15%	No significant correlation	
Feeling humiliated	4%	11%	0.127	2.571
Feeling stupid	5%	13%	No significant correlation	
Feeling childish	5%	14%	0.035*	3.312
Feeling helpless / paralyzed	25%	41%	0.047*	2.040
Feeling of blushing	10%	22%	0.466	1.343
Feeling laughable	3%	6%	No significant correlation	
Feeling disgusting to others	1%	3%	No significant correlation	

** Odd ratio is significant at the 0.05 level*

Similar to feelings of shame, external experiences of humiliation are frequently experienced by only about 14% - 16% of the population. While there is no difference between Samurdhi and non-Samurdhi households relating to perceptions of being treated either with respect or prejudice, respondents from Samurdhi households have 3.5 times the odds of a respondent from Samurdhi household to report that they are often treated unfairly.

Compared to individual experiences of disrespectful, unfair or prejudicial treatment, there is a greater perception among the sample population that discrimination exists in society. Compared to 12% of respondents who said that they themselves experienced a prejudicial incident in the recent past, as many as 33% felt that there is discrimination relating to access to public services and as many as 38% felt that there is discrimination in relation to obtaining public sector jobs. However, there is no evidence to link Samurdhi recipient households with discrimination and the data indicates that while there is some commonly held perceptions about the prevalence of discrimination in society due to poverty, these perceptions are held by both Samurdhi and non Samurdhi households alike.

Compared to the perceptions regarding the prevalence of discrimination in society, accumulated internal experiences of humiliation is very low. While 11% of the

²⁷ See Appendix 1, table 4

respondents felt that they had often felt excluded, less than 8% reported feelings of being put down, ridiculed, discounted, cruelly criticized or called derogatory names. While few respondents reported feelings of accumulated humiliation, more Samurdhi recipient households report feelings of being put down, ridiculed and called derogatory names (Table 10). Qualitative analysis shows that where being called derogatory names is reported, it is usually in relation to disputes with family or neighbours.

Table 10: Accumulated Humiliation

Throughout your life, how seriously have you felt harmed by being :	Non Samurdhi household	Samurdhi household	Samurdhi Yes = 1 , No = 0	
			Sig.	Odd Ratio
Almost always/Often = 1, Occasionally/Rarely or never = 0				
Excluded	11%	32%	No significant correlation	
Put down	8%	18%	0.006*	4.275
Ridicule	6%	15%	0.009*	4.641
Discounted	8%	24%	0.715	0.715
Cruelly criticized	6%	10%	No significant correlation	
Called names or referred to in derogatory terms	6%	19%	0.002*	6.310

*, Odd ratio is significant at the 0.05 level

In summary, deprivation by indicator (Table 11) shows that more Samurdhi respondents are deprived in unfair treatments (38.1% compared to 18.3% among non Samurdhi households) and accumulated humiliation (63.9% compared to 42.5% among non Samurdhi households).

Table 11: Deprivation by Headcount – Dignity

	Non – Samurdhi %	Samurdhi %
Discrimination (<i>treated with prejudice during past three months Perception that discrimination exists due to ethnic, language or cultural background, being a woman, when one is poor</i>)	71.8	60.0
Accumulated Humiliation (variables selected using factor analysis ²⁸)	42.5	63.9
Unfair Treatments (<i>always, often treated unfairly</i>)	18.3	38.1
Stigma of Poverty (<i>feel ashamed if poor / if family member is poor / poor people should be ashamed</i>)	22.0	31.7

In terms of deprivation on multiple indicators simultaneously, a larger proportion of Samurdhi households compared to non Samurdhi households are deprived three or more indicators in the dignity dimension.

²⁸ See Appendix 2, Table 4

Table 12: Deprivation in Multiple Indicators – Dignity

Deprivation by number of indicators	Cumulative %	
	Non Samurdhi	Samurdhi
1 or more	90.4	93.4
2 or more	45.8	59.9
3 or more	15.6	43.4
All 4 indicators	2.2	6.6

n = 192, missing values 37 households (16%)

Physical Safety and Security

Violence, resulting from everyday crime, large scale communal conflicts, insurgencies, or through state repression can undo the development gains achieved in education, health, employment, capital generation and infrastructure provision. It impedes human freedom to live safely and securely and can sustain poverty traps in many communities (Diprose, 2007). Physical safety therefore, is an important dimension of wellbeing and was assessed in relation to incidence and frequency of general crime (such as theft) and conflict related violence (such as bomb explosions) against both person and property; and perceptions of threat to security and safety, both now and in the future (Diprose, 2007). In this study, two indicators were considered – safety at home, neighbourhood and community, and likelihood of future violence.

The survey however found very few incidences of violence in the Badulla District with less than 5% of the surveyed households experiencing any incidences of general crime or conflict related crime during the previous 12 months²⁹. Such small numbers does not allow robust statistical testing, but there does not seem to be any difference between Samurdhi and non Samurdhi households in this connection.

There is very little violence in Haputale. Every two years or so all the shops are broken into. But there is no real problem.

- Male, Focus Group, Urban

Psychological and Subjective Well Being

Because there is sufficient evidence to show that happiness and income are not linked beyond very low levels of income, attempts are being made to measure happiness and wellbeing directly. In this section, we consider some eudaimonic (psychological

²⁹ A different picture may have emerged had the pilot been conducted in areas which were more directly affected due to the conflict, and other studies would need to be carried out to fully test this dimension and its applicability to Sri Lanka.

wellbeing) and hedonic (subjective wellbeing) measure suggested by Samman (2007) to compare happiness and wellbeing among Samurdhi and non Samurdhi households.

An important element of psychological wellbeing is the search for and presence of meaning in life. There is very little difference between respondents from Samurdhi and non Samurdhi households with only 13% of respondents Samurdhi households feeling that their life has no clear meaning or purpose, compared to 25% of respondents from non Samurdhi households who feel the same. When asked whether they have a clear sense of what gives meaning to their life, respondents from Samurdhi households have odds of less than 1, as non Samurdhi households to respond negatively. Overall, Samurdhi households seem marginally more positive about having meaning in their lives.

Meaning in life can be complemented by the self determining theory which holds that three other psychological needs – autonomy, competence and relatedness - are needed for self fulfilment and growth (Deci and Ryan, quoted in Samman, 2007). In relation to autonomy, competence and relatedness, there is no significant difference between Samurdhi households and non Samurdhi households, with the only exception being that respondents from Samurdhi households have odds of less than 1 of respondents from Samurdhi households, to feel that that people in their lives (such as family and friends) care about them. Qualitative data shows that this is most often due to problems and estrangement from children, siblings and parents, and respondents are thinking of one particular incident which is uppermost in their minds, when they indicate such lack of relatedness. Overall, there appears to be little difference between Samurdhi and non Samurdhi households in relation to psychological wellbeing, with Samurdhi households showing that they are less deprived in some of the variables that make up these indicators.

In relation to subjective wellbeing too, there is no significant difference between Samurdhi and non Samurdhi households in relation to happiness. Around 90% of households in the survey reported that they are happy and there is no significant difference between Samurdhi and non Samurdhi households. On other subjective wellbeing indicators such as satisfaction with life overall, food, housing, income, health and so on, however, Samurdhi recipients are less satisfied than the non Samurdhi households (Table 14).

Table 14: Satisfaction with aspects of life

Domains	Non Samurdhi Household	Samurdhi Household	Samurdhi %	
			Sig.	Odd Ratio
Life in general	94%	79%	0.003*	.234
Food	94%	88%	No significant correlation	
Housing	83%	61%	0.003*	.330
Income	73%	42%	0.000*	.266
Health	86%	66%	0.003*	.305
Work	92%	77%	0.011*	.311
Local security	91%	93%	No significant correlation	
Friends	91%	88%	No significant correlation	
Family	96%	87%	0.036*	.296
Education	74%	55%	0.019	.434
Free choice	95%	85%	0.117	.424
Dignity	91%	87%	0.040*	.311

* Odd ratio is significant at the 0.05 level

94% of respondents from non Samurdhi households and 79% of respondents from Samurdhi households are happy with their life in general. Also, Samurdhi households are less satisfied with, income levels, family, health, dignity and respect, and work. These households tend to be those with multiple problems, such as disabled or sick members, and children who are not interested in their education, as well as low income. The respondents are worried about these things, which is very likely what is being reflected in this indicator.

When I am working in other people's fields, doing hard labour, sometimes I wonder why we were born poor... when I think of all the problems we have my head just starts to hurt.

- Male, 43 years, Rural, Samurdhi Household

It is difficult to say (how we compare to the rest of the village). I think we have a lot more problems, we don't even have a proper house, and the income we get is not enough to enable us to finish the house any time soon.

- Male, 62 years, Rural, Samurdhi household

There is nothing to do at home, so I go to work as a wage laborer in other people's lands. We eat from what I grow in the home garden. If it rains we have brinjals and corn. I work because it is a difficult situation at home. Husband doesn't work, so what can he contribute? A month is like a week. It passes quickly. I don't have a plan or aim in life. I don't have a goal or a meaning to live.

- Female, 26 years, Rural, Samurdhi household

Deprivation in subjective wellbeing is also reflected in the summary analysis; 48.8% of Samurdhi recipient households are deprived in relation to psychological wellbeing

indicators, compared to 39.4% in non Samurdhi households (Table 15). In contrast, 85.4% of Samurdhi recipient households are deprived in relation to subjective wellbeing indicators, compared to 58.5% in non Samurdhi households; they are 3.9 times more likely to be deprived in subjective wellbeing than non Samurdhi households.

Table 15: Deprivation by Headcount – Psychological and Subjective Well Being

	Non – Samurdhi %	Samurdhi %
Psychological wellbeing	39.4	48.8
Subjective wellbeing	58.5	85.4

In relation to the dimension, 87% of Samurdhi households are deprived in one or more indicator compared to 75.2% of non Samurdhi households (Table 16).

Table 16: Deprivation in Multiple Indicators, Psychological and Subjective Wellbeing

Deprivation by number of indicators	Cumulative %	
	Non Samurdhi	Samurdhi
1 or more	72.4	87.2
2 indicators	24.0	48.2

n=216, missing values 13 households (5.6%)

6. Conclusions and Policy Implications

The concept of multidimensional poverty is increasingly accepted among both the research and policy community. However, the implications of this understanding for policy has been limited due to problems of lack of clarity and consensus regarding concepts – particularly on what dimensions make up the multiple dimensions of poverty – and problems with data collection and availability. In this connection, OPHI’s multidimensional poverty modules provide a useful basis to progress past these obstacles to bring evidence from multidimensional poverty analysis to bear on policy decisions.

In this paper, we attempted to apply multidimensional poverty data to the policy need to improve the effectiveness of the national social protection programme, Samurdhi, in Sri Lanka. Using data from a pilot survey in the Badulla District Sri Lanka, we compared Samurdhi households with non Samurdhi households in relation to dimensions that are often ‘missing’ from survey data as well as attempted to compute deprivation in multiple aspects simultaneously. The results discussed above shows that there are some important differences, as well as similarities, among Samurdhi

and non Samurdhi households – an analysis of which can provide direction to further improve the design and delivery of the Samurdhi Programme.

The two main policy questions in relation to the Samurdhi Programme are (i) accuracy of its targeting and (ii) effectiveness of the programme in moving people out of poverty. In relation to targeting, the data discussed in this paper adds to existing knowledge (which focuses on exclusion and inclusion errors based mainly on the dimension of income, and in some cases basic needs such as access to adequate shelter and services) by providing data on deprivation experienced by Samurdhi and non Samurdhi households in relation to a number of important dimensions such as quality of employment, empowerment, dignity, psychological and subjective wellbeing. For example, the survey shows that Samurdhi households are deprived in relation to subjective wellbeing indicators, which may provide evidence to indicate that targeting within the Samurdhi Programme is not as ineffective as some critics of the programme believe. These households may not be similar in relation to income or household situation, but the number and extent of problems they face – often unique to that household - shows that the programme has some degree of flexibility to recognize and respond to the multiple experiences of poverty among needy households.

In relation to programme effectiveness, a number of indicative findings may be relevant. For example, in relation to quality of employment, heads of Samurdhi households tend to be largely employed in the informal sector, in low return activities such as wage work. They are vulnerable to shocks as they have no protection from their employment during times of illness or lack of work, and they also have little savings of their own. There are implications from this for the employment and income generating activities promoted by the Samurdhi Programme, which focus mainly on capacity building and training activities with a view to shifting wage workers into self employment. However, given the income vulnerability that exists in these households, many are unlikely to be able to bear the loss of income during the transition or the risks involved in the main income earner shifting to new activities. The option of doing a secondary or tertiary activity may also not be available, as income earners in some Samurdhi household already feel overworked. However, there is an interest in supplementary income sources, with many households engaging in supplementary activities such as home gardening. In common with other households in the district, in Samurdhi households too there is considerable discouraged unemployment – with household members such as adult children, interested in working but unable to find work. The results of this analysis suggests that the Samurdhi Programme could focus more on such other members of the household to provide new income generating opportunities to supplement the main income generating activity; this would support the programme's aim of promoting households out of poverty while not increasing household vulnerability further.

Analysis of the dignity and respect dimension also provides some policy implications for Samurdhi. The survey finds that while there are widely expressed views that being poor is nothing to be ashamed of, among poor households there are indications that they are ashamed, or made to feel ashamed by others, due to their poverty. In such a context, the new community selection methods to increase the effectiveness of Samurdhi targeting may have unintended, adverse implications on programme beneficiaries. The selection method involves households being identified as poor in a public meeting at the village level, and given the tendencies to shame proneness and accumulated humiliation among Samurdhi households, such an exercise is likely to further deepen their feelings of helplessness and exclusion.

Aggregating data into composite indices shows interesting trends but has proven to be methodologically problematic. Issues of variable / indicator selection, deprivation cut off levels, weights for individual units within the composite etc require a number of assumptions on the part of the analyst that may or may not hold in reality. In the case of this study, the availability of qualitative data helped to guide these assumptions, particularly as data is being collected on aspects and dimensions of poverty and wellbeing on which there is limited context-specific literature.

Overall however, the multidimensional analysis presented in this paper provides further evidence to support the widely accepted view that poor households are deprived on a number of dimensions, not just in the income dimension. The analysis suggests that dimensions of importance are income, basic needs, quality of employment, dignity and respect, and psychological and subjective wellbeing. It also raises a conceptual issue of whether similarities, or lack of differences, in other dimensions notably empowerment and safety are showing that these are not aspects of poverty in the Sri Lankan context, or whether they are reflecting issues specific to this survey location. Larger studies, perhaps representative at the national level, are needed therefore to provide a complete picture of multidimensional poverty in Sri Lanka, but the OPHI modules can provide the basis for such inquiry.

Bibliography

- Alkire, S. (2007). The Missing Dimensions of Poverty Data: Introduction to the Special Issue . *Oxford Development Studies* , 347 - 359.
- Anand, S., & Sen, A. (1997). Concepts of Human Development and Poverty: A Multidimensional Perspective. In *Human Development Report 1997 Papers: Poverty and Human Development*. New York: United Nations Development Programme.
- Asselin, L. (2009). Analysis of Multidimensional Poverty: Theory and Case Studies. *Economic Studies in Inequality, Social Exclusion and Wellbeing* , Vol.7.
- Baulch, B. (1996). Editorial: The New Poverty Agenda: A Disputed Consensus. *IDS Bulletin* , p. 27 (1).
- Central Bank of Sri Lanka. (2010). *Annual Report 2009*. Colombo: CBSL.
- Department of Census and Statistics. (2007). *Household Income and Expenditure Survey 2006/2007*. Colombo.
- Department of Census and Statistics. (2009). *Sri Lanka Labour Force Survey Final Report 2008*. Colombo.
- Diprose, R. (2007). *Safety and Security: A Proposal for Internationally Comparable Indicators of Violence*. Oxford: University of Oxford.
- Glinskaya, E. (2000). *An Empirical Evaluation of the Samurdhi Programme: Background Paper for Sri Lanka Poverty Assessment* . Washington D.C.: The World Bank.
- Grosh, M., Ninno, C. d., Tesliuc, E., & Ouerghi, A. (2008). *For Protection and Promotion: The Design and Implementation of Effective Safety Nets*. Washington D.C.: The World Bank.
- Gunatilaka, R. (2008). Improving Effectiveness of Social Protection Programmes: Lessons from Sri Lanka's Recent Experiences. *Regional Dialogue on Renewed Policy Action for the Poorest and Hungry in South Asia*. New Delhi: International Food Policy Research Institute (IFPRI).
- Gunatilaka, R. (2010). Safety Nets for Social Protection: Sri Lanka's Samurdhi Programme. *Research Meeting on Social Protection Policies in South Asia*. New Delhi: Indian Council for Social Science Research (ICSSR).
- Gunatilaka, R., Perera, R., Salih, R., & De Silva, C. (1997). *The Samurdhi Programme: A Preliminary Evaluation*. Colombo: Institute of Policy Studies.
- Gunewardena, D. (2005) *Improving Poverty Measurement in Sri Lanka*, Colombo: Centre for Poverty Analysis.

- Hewavitharana, B. (2004). Poverty Alleviation. In S. Kelegama, *Economic Policy in Sri Lanka: Issues and Debates* (pp. 467 - 496). New Delhi: Sage Publications.
- Ibrahim, S., & Alkire, S. (2007). *Agency and Empowerment: A Proposal for Internationally Comparable Indicators*. Oxford: University of Oxford.
- International Labour Organization. (2009). *Decent Work Country Programme Sri Lanka 2008-2012*. Colombo: ILO.
- Kanbur, R., & Squire, L. (1999). *The Evolution of Thinking about Poverty: Exploring the Interactions*. Washington D.C.: The World Bank.
- Lugo, M. (2007). *Employment: A Proposal for Internationally Comparable Indicators*. Oxford: University of Oxford.
- Ministry of Finance & Planning. (2006). *Mahinda Chinthana: Vision for a New Sri Lanka 2006-2026*. Colombo: Government of Sri Lanka.
- Ministry of Labour Relations & Manpower, Central Bank of Sri Lanka and Department of Census and Statistics. (2009). *Labour and Social Trends in Sri Lanka*. Colombo: ILO.
- Ministry of Samurdhi & Poverty Alleviation. (2007) *Progress 2006 and Programme 2007*, Colombo: Ministry of Samurdhi & Poverty Alleviation
- Parliament of the Democratic Socialist Republic of Sri Lanka. (1995). *Samurdhi Authority of Sri Lanka Act No.30 of 1995* . certified on 11th December 1995.
- Ranis, G., Stewart, F., & Samman, E. (2005). *Human Development: Beyond the HDI*. New Haven: Economic Growth Centre, Yale University.
- Ratnayake, R.M.K. (1997) *Poverty Alleviation through Samurdhi Programme*, paper presented at the Organisation of Professional Associations Seminar on Poverty Alleviation, July 2, 1997
- Reyles, D.Z. (2007). *The ability to go about without shame: A Proposal for Internationally Comparable Indicators*. Oxford: University of Oxford.
- Robeyns, I. (2003). *The Capability Approach: An Interdisciplinary Introduction*, Boston: Human Development and Capability Association
- Samman, E. (2007). *Psychological and Subjective Wellbeing: A Proposal for Internationally Comparable Indicators*. Oxford: University of Oxford.
- Sen, A. (1976). Poverty: an ordinal approach to measurement, in *Econometrica*, 44 (2), pp.219-231
- Sen, A. (1999). *Development as Freedom*. New York: Anchor.
- The World Bank. (2007). *Sri Lanka: Poverty Assessment: Engendering Growth with Equity- Opportunities and Challenges*. Colombo: The World Bank.
- Thorbecke, E. (2005). Multi-dimensional Poverty: Conceptual and Measurement Issues. *The Many Dimensions of Poverty International*.

Tudawe, I. (2002). Strategies for poverty alleviation in Sri Lanka. *Assessment of Poverty Reduction Policies*. Rabat: INSEA and IDRC under Micro Impacts of Macroeconomic Adjustment Policies.

United Nations Development Programme. (various). *Human Development Reports*. New York: UNDP.

United Nations Development Programme. (2010). *The Real Wealth of Nations: Pathways to Human Development. Human Development Report, 20th Anniversary Edition*. New York: UNDP.

Appendix 1: Deprivation by Indicators, Odds Ratio Output

Table 1: Income and Basic Needs

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Income	Below the poverty line	44.3%	82.5%	0.000*	5.776
Assets	No radio in the house	21%	31%		
	No TV in the house	19%	37%		
	No Refrigerator in the house	63%	91%		
	No telephone (land/mobile) in the house	50%	70%		
Shelter	Poor quality floor (not cement or tile)	14%	33%	0.003*	3.193
	Poor quality walls (not brick or block)	17%	33%	0.016*	2.475
	Poor quality roof (not tile, asbestos or concrete)	35%	21%	0.101	0.514
	Less than 2 rooms in the house	48%	70%	0.009*	2.609
	COMPOSITE (poor quality floor OR walls OR roof OR less than 2 rooms)	52%	52%	No statistically significant correlation	
	COMPOSITE (poor quality floor AND walls AND roof AND less than 2 rooms)	5%	12%	No statistically significant correlation	
Sanitation	No water-seal toilet in the house	18%	14%	No statistically significant correlation	
Lighting	Source other than electricity	18%	50%	0.000*	4.373

Table 2: Quality of Employment

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Protection	Employment basis (Temporary/Casual = 1, Permanent = 0)	46%	81%	0.000*	6.368
	Non monthly payment of salary (Yes = 1, No = 0)	42%	76%	0.000*	10.108
	No written contract (Yes = 0, No =1)	55%	79%	0.000*	4.170
	Maternity leave (Yes = 0, No =1)	12%	80%	No statistically significant correlation	
	No social security benefits (Yes = 0, No =1)	57%	87%	0.000*	10.458
	Retirement pension (Yes=0, No=1)	84%	90%		
	Do not have sufficient savings to get by if loss of job	76%	97%	0.014*	10.362
	No formalised plans for retirement	26%	51%	No statistically significant correlation	
	COMPOSITE (no savings to get by in case of loss of job OR no formal plans for retirement)	80 %	98%	0.027*	8.294
	COMPOSITE (no savings to get by in case of loss of job AND no formal plans for retirement)	22%	51%	0.000*	3.661
Safety and Occupational Hazard	Suffered serious accident or illness related to work	22%	5%	No statistically significant correlation	
	Inadequate clean water at work place	22%	6%	0.013*	0.207
	Inadequate toilet facilities at work place	19%	2%	0.015*	0.099
	Work in uncomfortable posture	53%	38%	0.000*	0.266
	Exposure to harsh weather	27%	11%	No statistically significant correlation	

	Having to carry heavy loads	27%	25%	No statistically significant correlation	
	Concerned about permanent harm from job in the future)	51%	40%	No statistically significant correlation	
	COMPOSITE (illness, injury or disability from job OR concerned about permanent harm from job in the future)	59%	45%	0.027*	8.294
	COMPOSITE (illness, injury or disability from job AND concerned about permanent harm from job in the future)	1%	0%	No statistically significant correlation	
Time	Multiple Activities	65%	67%	No statistically significant correlation	
	Under employment (would like to work more)	68%	72%	No statistically significant correlation	
	Over employment (would like to work less)	10%	28%	0.017*	3.892

Table 3: Empowerment

Table 3a: Household Decision Making

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Choice: Household decision making	Decisions about one's job are not made by themselves or jointly with other household members	8%	10%	No statistically significant correlation	
	Decision about minor household expenses are not made by themselves or jointly with other household members	11%	11%	No statistically significant correlation	
	Decisions about what household work one does are not made by themselves or jointly with other household members	19%	16%	No statistically significant correlation	
	Decisions about one's health are not made by themselves or jointly with other household members	19%	20%	No statistically significant correlation	
	Decisions about one's safety are not made by themselves or jointly with other household members	18%	51%	0.002*	0.315
	Decisions about one's religion are not made by themselves or jointly with other household members	5%	9%	No statistically significant correlation	

* Odds ratio is significant at the 0.05 level

Table 3b: Domain Specific Autonomy – Samurdhi Households

Domains	Integrated Regulation <i>(Because activity is both valuable, and its pursuit is integrated with the person's other activities).</i>		External regulation <i>(Because of external pressure - to obtain rewards or avoid punishment).</i>		Introjected regulation <i>(Because doing so will gain approval by others or avoid guilt and Shame)</i>		Identified Regulation <i>(Because the person identifies the activity to be valuable)</i>	
	Sig.	Odd Ratio	Sig.	Odd Ratio	Sig.	Odd Ratio	Sig.	Odd Ratio
Employment			0.007*	27.497				
Housework								
Reaction to a serious health problem			0.018*	3.213				
Minor household expenses			0.125	2.828	0.322	2.123		
Religious practices			0.079	5.505	0.256	3.280		
Protection against violence	0.328	1.372						

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Change: global autonomy	Inability to change aspects in life	53%	48%	No statistically significant correlation	
	Inability to change aspects in community	47%	34%	No statistically significant correlation	

Table 3c: Global Autonomy – Samurdhi Households

Table 4: Dignity

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Stigma of Poverty	ashamed if they were poor	23%	29%	No statistically significant correlation	
	ashamed if someone in their family were poor	20%	30%	No statistically significant correlation	
	People who are not poor make people who are poor feel bad	70%	62%	No statistically significant correlation	
Shame Proneness	Embarrassment	16%	32%	0.022*	2.444
	Feeling ridiculous	4%	14%	0.020*	3.883
	Self-consciousness	11%	15%	No statistically significant correlation	
	Feeling humiliated	4%	11%	0.127	2.571
	Feeling stupid	5%	13%	No statistically significant correlation	
	Feeling childish	5%	14%	0.035*	3.312
	Feeling helpless / paralyzed	25%	41%	0.047*	2.040
	Feeling of blushing	10%	22%	0.466	1.343
	Feeling laughable	3%	6%	No statistically significant correlation	
	Feeling disgusting to others	1%	3%	No statistically significant correlation	
Unfair Treatment	Always/often treated unfairly by people	11%	30%	0.002*	3.534
Discrimination	Treated with prejudice during past three months	12%	14%	No statistically significant correlation	
	In relation to access to public services	33%	25%	No statistically significant correlation	
	In relation to obtaining public sector jobs	38%	44%	No statistically significant correlation	

5. Psychological and Subjective Well Being Dimension

Indicator	Deprivation	Non Samurdhi	Samurdhi	Samurdhi	
				sig	Odds ratio
Meaning	Life has no clear meaning or purpose	25%	13%	0.054	0.441
	Have not found a satisfactory meaning in life	15%	23%	No Statistically significant correlation	
	Have no clear sense of what gives meaning to life	25%	11%	0.023*	0.379
Autonomy	Dont feel free to decide how to lead life	18%	8%	0.059	0.399
	Dont feel free to express ideas and opinions	7%	12%	No Statistically significant correlation	
	Dont feel can be honest with oneself	10%	9%	No Statistically significant correlation	
Competence	Other people do not feel one is competent at one does	6%	6%	No Statistically significant correlation	
	Do not feel a sense of accomplishment	5%	7%	No Statistically significant correlation	
	Do not generally feel capable	5%	10%	No Statistically significant correlation	
Relatedness	Do not get along with people one meets	5%	11%	No Statistically significant correlation	
	Do not feel close to the people one interacts regularly with	8%	14%	No Statistically significant correlation	
	Do not feel that people in life care about one	8% %	21%	0.029*	0.360
Happiness		90%	85%	0.207	0.532
Life satisfaction - Domain	Life overall	94%	79%	0.003*	0.234
	Food	94%	88%	No Statistically significant correlation	
	Housing	83%	61%	0.003*	0.330
	Income	73%	42%	0.000*	0.266
	Health	86%	66%	0.003*	0.305
	Work	92%	77%	0.011*	0.311
	Local security	91%	93%	No Statistically significant correlation	
	Friends	91%	88%	No Statistically significant correlation	
	Family	96%	87%	0.036*	0.296
	Education	74%	55%	0.019*	0.434
	Free choice	95%	85%	0.117	0.424
	Dignity	91%	87%	0.040*	0.311
	Neighbourhood	96%	85%	No Statistically significant correlation	
	Spiritual	99%	97%	No Statistically significant correlation	

Appendix 2: Steps followed in aggregating variables into indicators

1. Income and Basic Needs

Indicator	Question	Selection criteria
Income		per capita income is below the district poverty line (Rs 3151/- as per Jan 2010)
Shelter COMPOSITE Floor / wall / roof / rooms	floor	Yes for Clay / Mud /Wood (low grade planks, cheap wood etc) / Sand or Other
	wall	Yes for Cabook / Pressed soil blocks / Mud or Cadjan / Palmyra / Plank/ Metal sheet or Other
	roof	Yes for Metal sheet / Cadjan/ Palmyra/ Straw or Other
	> 2 rooms	Yes for less than 2 rooms
Sanitation	Toilet type	Yes for Pit Latrine or Other
Energy for Lighting		Yes for Kerosene or Other

2. Employment Quality

Indicator	Question	Selection criteria
Protection COMPOSITE Formal plans / HH able to get by	Employment basis, payment type, contract, paid sick leave	Not included in composite as insufficient data points.
	Formal plans to finance expenses in old age	Answer - No
	HH able to get by for three months if loss of job	Answer - No
Safety and Occupational Hazards COMPOSITE Injury, illness and disability from job / concerned about permanent harm from job	Suffered an injury illness disability caused by work	Answer - Yes
	Concerned that job may cause physical or mental harm in future	Answer – Yes, a permanent effect, but able to work, although not in the same job OR a permanent effect that prevents from working at all
Under employment	like to work more hours	Answer - Yes
Over employment	like to work fewer hours	Answer - Yes
Multiple income activities	Engaged in secondary employment	Answer - No

3. Empowerment

Indicator	Question	Selection criteria
Domain specific Autonomy (Relative autonomy) Weighted according to Relative Autonomy Index in Technical Notes to Missing Dimension www.ophi.org	Choice of job	External regulation (<i>Because of external pressure - to obtain rewards or avoid punishment</i>) or Introjected regulation (<i>Because doing so will gain approval by others or avoid guilt and shame</i>)
	Choice of what household work one does	
	Choice of making minor household purchases	
	Choice of what to do in case of serious illness	
	Choice of religion	
	Choice of practices to ensure personal safety	
Global Autonomy COMPOSITE Ability to change own life plus ability to change aspects in community	Ability to change aspects in own life	No change
	Ability to change aspects in community	Can change (easily , or with a little difficulty)

4. Dignity

Indicator	Question	Selection criteria
Discrimination COMPOSITE Treated with prejudice plus perception discrimination exists due to ethnic, language etc,	Treated with prejudice during past three months	Answer - Yes, almost always or Yes, often
	Perception that discrimination exists due to ethnic, language or cultural background	Using factor analysis, if answer was yes, for access to public services / public sector jobs / government contracts / private sector jobs / education opportunities at technical / university level.
	Perception that discrimination exists if one is a woman	Using factor analysis, if answer was yes, for access to public services / public sector jobs / government contracts / private sector jobs / education opportunities at school / technical / university level.
	Perception that discrimination exists due to poverty	Using factor analysis, if answer was yes, for access to public services / public sector jobs / government contracts / private sector jobs, AND Yes for education opportunities at school/ technical / university level.
Accumulated Humiliation	Almost always, often feel ...	Using factor analysis, if answer was yes for embarrassment/ feeling ridiculous/ self conscious/ humiliated, AND yes for feeling stupid / childish/ helpless AND yes for feeling laughable / disgusting to others
	Throughout life, felt seriously harmed by being ...	Using factor analysis, if answer is yes for excluded / put down / ridiculed / discounted / cruelly criticised / called derogatory names
Unfair Treatments	Treated unfairly	Answer Always / often
Stigma of Poverty	Ashamed	Using factor analysis, if answer is ashamed if poor / ashamed if some in family is poor / people living in poverty should be ashamed

4. Psychological and Subjective Well Being\

Indicator	Question	Selection criteria
Psychological wellbeing		Using factor analysis, if answer is not at all true / fairly true for have meaning / found satisfactory meaning / have clear sense of what gives meaning
	Meaning	
	Autonomy	Using factor analysis, if answer is not at all true / fairly true for feel free to decide how to lead life / free to express ideas / can be honest with one self
	Competence	Using factor analysis, if answer is not at all true / fairly true for people feel one is competent / feel sense of accomplishment / generally feel very capable
	Relatedness	Using factor analysis, if answer is not at all true / fairly true for get along with people one comes into contact with / consider close to the people regularly interacting with / people in life care about one
Subjective wellbeing	Happiness	Answer - not very happy / not at all happy
	life satisfaction - domain	Using factor analysis Not satisfied with life overall / food, / amount of free choice and control over your life /ability to help others) AND Not satisfied with housing / income /work family / education) AND Not satisfied with local security level/ spiritual religious or philosophical beliefs